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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,418	12/04/2003	Rishi Nangalia	G08.071	7729

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BUCKLEY, MASCHOFF, TALWALKAR LLC  
5 ELM STREET  
NEW CANAAN, CT 06840

EXAMINER

CANGIALOSI, SALVATORE A

ART UNIT PAPER NUMBER

3621

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



**Office Action Summary**

Application No.

10/727,418

Applicant(s)

NANGALIA ET AL.

Examiner

Salvatore Cangialosi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 19-26, 37, 38, 43 and 44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 19-26, 37, 38, 43 and 44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/25/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_



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1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requires of this title.

Claims 1-8, 37, 38, 43 and 44 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, claims 1 or 7 only recite an abstract idea. The recited steps of merely determining to route an order does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of whether to route an order.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention order routing



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determination (i.e., useful and tangible).

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claim 1 is deemed to be directed to non-statutory subject matter.

In the present case, claims 37 or 43 only recite an abstract idea. The recited medium having steps of merely determining to route an order does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of whether to route an order.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention order routing determination (i.e., useful and tangible).

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claim 1 is deemed to be directed to non-statutory subject matter since the medium is not a computer readable medium.



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2. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this

Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

3. Claims 1-8, 19-26, 37,38, 43 and 44 are rejected under 35 U.S.C. § 103 as being unpatentable over either Waelbroeck et al.

Regarding claim 1, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose a method of determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution substantially as claimed. The differences between the above and the claimed invention is the use of the term attributes. It is noted that it is believed that the CTI data shown are functionally equivalent to attributes. It would have been obvious to the person having ordinary skill in



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this art to provide a similar arrangement for either Waelbroeck et al because the order routing shown in the prior art is equivalent to the claim limitations. Regarding the partial limitations of claim 2, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution which is a functional equivalent of the claim limitations. Regarding the attribute limitations of claim 3, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution which is a functional equivalent of the claim limitations. Regarding the attribute limitations of claim 4, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution which is a functional equivalent of the claim limitations. Regarding the attribute limitations of claim 5, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for



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827) disclose determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution which is a functional equivalent of the claim limitations. Regarding the attribute limitations of claim 6, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution which is a functional equivalent of the claim limitations. Regarding claim 7, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose a method of determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution substantially as claimed. The differences between the above and the claimed invention is the use of the term attributes. It is noted that it is believed that the CTI data shown are functionally equivalent to attributes. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for either Waelbroeck et al because the order routing shown in the prior art is equivalent to the claim limitations. Regarding the partial limitations of claim 8, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6,



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paragraphs 74-96, claims for 827) disclose determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution which is a functional equivalent of the claim limitations. Regarding claim 19, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose a means of determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution substantially as claimed. The differences between the above and the claimed invention is the use of the term attributes. It is noted that it is believed that the CTI data shown are functionally equivalent to attributes. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for either Waelbroeck et al because the order routing shown in the prior art is equivalent to the claim limitations. Regarding the partial limitations of claim 20, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution which is a functional equivalent of the claim limitations. Regarding the attribute limitations of claim 21, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77,



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claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution which is a functional equivalent of the claim limitations. Regarding the attribute limitations of claim 22, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution which is a functional equivalent of the claim limitations. Regarding the attribute limitations of claim 23, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution which is a functional equivalent of the claim limitations. Regarding the attribute limitations of claim 24, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution which is a functional equivalent of the claim limitations. Regarding claim 25, Waelbroeck et al (See



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abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose a means of determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution substantially as claimed. The differences between the above and the claimed invention is the use of the term attributes. It is noted that it is believed that the CTI data shown are functionally equivalent to attributes. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for either Waelbroeck et al because the order routing shown in the prior art is equivalent to the claim limitations. Regarding the partial limitations of claim 26, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution which is a functional equivalent of the claim limitations. Regarding claim 37, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose a medium including the steps of determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution substantially as claimed. The differences between the above and the claimed



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invention is the use of the term attributes. It is noted that it is believed that the CTI data shown are functionally equivalent to attributes. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for either Waelbroeck et al because the order routing shown in the prior art is equivalent to the claim limitations. Regarding the partial limitations of claim 38, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution which is a functional equivalent of the claim limitations. Regarding claim 43, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs.5,6, paragraphs 74-96, claims for 827) disclose a medium including the steps of determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution substantially as claimed. The differences between the above and the claimed invention is the use of the term attributes. It is noted that it is believed that the CTI data shown are functionally equivalent to attributes. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for either Waelbroeck et al because the order routing shown in the prior art is equivalent to the claim limitations. Regarding the



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partial limitations of claim 44, Waelbroeck et al (See abstract, Figs. 5, 6, paragraphs 62-77, claims 1-38 for 672, and Figs. 5, 6, paragraphs 74-96, claims for 827) disclose determining during a trading session whether to route and order based on Certified Trading Interest data including activity history, full or partial execution which is a functional equivalent of the claim limitations.

Any inquiry concerning this communication should be directed to Salvatore Cangialosi at telephone number **(571) 272-6927**. The examiner can normally be reached 6:30 Am to 5:00 PM, Tuesday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached at **(571) 272-6712**.

**Any response to this action should be mailed to:**

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Alexandria, VA 22313-1450

**or faxed to (703) 872-9306**

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 3600 Customer Service Office whose telephone number is (703) 306-5771.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
SALVATORE CANGIALOSI  
PRIMARY EXAMINER  
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